

Patent Claims

1. Knife holder for a knife tool head which can be assembled with chipping knives on the periphery and slabbing knives on the end face, in particular for a chipping knife tool head,

- comprising a holder body (1, 14) with a mounting face (6) for a chipping knife (7) and an adjacent mounting face (4) for a slabbing knife (5) adjacent thereto and with an inclination and
- knife mounting means (9, 10, 11) for detachable fastening of the chipping knife and the slabbing knife on the respective mounting face,

characterized in that

- both mounting faces (4, 6) have holder contact faces (14a, 14b, 14c, 14d) which are inclined with a V-shaped cross section, and
- the knife mounting means are direct fastening means (9, 10, 11) which secure the chipping knife (7) and the slabbing knife (5), each having knife contact faces (5c, 5d, 7c, 7d) inclined in a V shape correspondingly, directly on the respective mounting face with a holding force acting between the contact faces inclined in a V shape.

2. Knife holder, in particular as claimed in Claim 1, for a knife tool head that can be assembled with peripheral chipping knives and end face slabbing knives, in particular for a chipping knife tool head, comprising

- a holder body (1, 14) with a mounting face (6) for a chipping knife (7) and an adjacent mounting face (4) for a slabbing knife (5) inclined toward it, and
- knife mounting means (9, 10, 11) for detachable fastening of the chipping knife and the slabbing knife on the respective mounting face,

characterized in that

- the knife mounting means are direct fastening means (9, 10, 11) which secure the chipping knife (7) and the slabbing knife (5) directly on the respective mounting face (4, 6), and
- the holder body (1, 4) is designed as a one-piece part and means (12, 13) are provided for directly attaching the holder body.

3. Knife holder as claimed in Claim 1 or 2, additionally characterized in that the direct fastening means consist of a single screw connection (9) for the slabbing knife (5) and one or two screw connections (10, 11) for the chipping knife (7).

4. Knife holder as claimed in any one of Claims 1 through 3, additionally characterized in that the angle (α) formed by the cutting edges (5a, 7a) of the chipping knife and the slabbing knife in a horizontal projection of the knife is between 130° and 230°.

5. Knife holder as claimed in any one of Claims 1 through 4, additionally characterized in that the angle (β) formed by the cutting edges (5a, 7a) of the chipping knife and the slabbing knife in a side projection of the knife is between 80° and 180°.

6. Knife holder as claimed in any one of Claims 1 through 5, additionally characterized in that holder fastening means (12, 13) are provided laterally next to the knife mounting faces (4, 6) of the knife holder for attaching the knife holder (1, 14) on the knife tool head.

7. Knife for a knife holder as claimed in any one of Claims 1 through 6, comprising

- one or two knife cutting edges (7a, 7b) opposite one another on the longitudinal side,

characterized in that

- one or both transverse sides (32, 33, 38, 39) has/have one or two inclined contact regions (34 to 37, 38a, 38b, 39a, 39b) extending away from a respective knife cutting edge end, its slope adapted to the relative position of the knife, which can be mounted on the knife holder as the chipping knife or as the slabbing knife, with

respect to the other knife that can be attached to the holder such that the two knives form a linear or area contact with one another after being mounted on the holder.

8. Knife tool head comprising

- a base body (22, 26) in the form of a truncated cone or cylinder and
- multiple knife holders (1, 28, 24a, 24b) mounted on the circumference of the base body, one or more knives being mounted on each,

characterized in that

- multiple first knife holders (1, 24a, 24b) as claimed in any one of Claims 1 through 5 are distributed around the circumference of the base body, the knife holders being inserted in respective holder receptacles (23, 29) with one chipping knife (7, 7') in each and one slabbing knife (5), whereby the chipping knives point toward the lateral surface of the truncated cone shape of the base body and the slabbing knives point toward the end face of the base body.

9. Knife tool head as claimed in Claim 8, additionally characterized in that multiple second knife holders (28) are situated behind the first knife holders (1) and offset with respect to them in the circumferential direction, each being inserted with one chipping knife into the respective holder receptacles (29) of the lateral surface of the truncated cone shape of the base body.

10. Knife tool head as claimed in Claim 8 or 9, additionally characterized in that two different types of first knife holders (24a, 24b) having chipping knives (7, 7') of different lengths are used, arranged in a preselectable regular sequence in the circumferential direction.

11. Knife tool head as claimed in any one of Claims 8 through 10, additionally characterized in that the slabbing knives of two or more successive holders in the direction of rotation having chipping knives and slabbing knives are arranged in axially offset planes.